Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An immunogenic composition, comprising:

(a) at least one viral envelope protein or fragment thereof exterior to a viral membrane, wherein said viral envelope protein or fragment thereof is the gp41/gp120 complex;

(b) ~~an amount of~~ at least one stabilizing peptide in an amount effective to disrupt formation of one or more structural intermediates necessary for viral fusion and entry selected from the group consisting of: a peptide comprising SEQ ID NO:2, a peptide comprising a fragment of SEQ ID NO:2, a peptide comprising SEQ ID NO:3, a peptide comprising a fragment of SEQ ID NO:3, a peptide comprising SEQ ID NO:4, a peptide comprising a fragment of SEQ ID NO:4, a peptide comprising SEQ ID NO:5, a peptide comprising a fragment of SEQ ID NO:5, a peptide comprising SEQ ID NO:6, a peptide comprising a fragment of SEQ ID NO:6, a peptide comprising SEQ ID NO:7, a peptide comprising a fragment of SEQ ID NO:7, a peptide comprising SEQ ID NO:9, a peptide comprising a fragment of SEQ ID NO:9, a peptide comprising any combination of SEQ ID NOS:2-7 and 9, and a peptide comprising any combination of fragments of SEQ ID NOS:2-7 and 9; and, ~~optionally~~,

(c) ~~at least one viral cell surface receptor or fragment thereof~~, soluble CD4, wherein ~~the~~ said stabilizing peptide ~~is capable of associating~~ associates with the envelope protein or fragment thereof to form a stabilized, fusion-active structure.

Claims 2-6. (Cancelled)

7. (Currently Amended) An immunogenic composition, produced by a process comprising:

(a) incubating at least one non-infectious viral particle expressing gp41/gp120 with ~~a concentration of~~ one or more stabilizing peptides in a concentration effective to disrupt formation of one or more structural intermediates necessary for viral fusion and entry to obtain a mixture; wherein said stabilizing peptide is selected from the group consisting of: a peptide comprising SEQ ID NO:2, a peptide comprising a fragment of SEQ ID NO:2, a peptide comprising SEQ ID NO:3, a peptide comprising a fragment of SEQ ID NO:3, a peptide comprising SEQ ID NO:4, a peptide comprising a fragment of SEQ ID NO:4, a peptide comprising SEQ ID NO:5, a peptide comprising a fragment of SEQ ID NO:5, a peptide comprising SEQ ID NO:6, a peptide comprising a fragment of SEQ ID NO:6, a peptide comprising SEQ ID NO:7, a peptide comprising a fragment of SEQ ID NO:7, a peptide comprising SEQ ID NO:9, a peptide comprising a fragment of SEQ ID NO:9, a peptide comprising any combination of SEQ ID NOS:2-7 and 9, and a peptide comprising any combination of fragments of SEQ ID NOS:2-7 and 9; and

(b) adding ~~a soluble form of one or more viral cell surface receptors or a fragment thereof~~ soluble CD4 to the mixture, wherein said stabilizing

peptide or peptides associate with said gp41/gp120 complex, and whereby an immunogenic composition is created.

Claims 8-29 (Cancelled)

30. (Currently amended) ~~A product formed by the method of claim 9~~. A product produced by a method comprising:

(a) incubating at least one non-infectious viral particle with gp41/gp120 complex exterior to the viral membrane, with at least one stabilizing peptide, in an amount effective to disrupt formation of one or more structural intermediates necessary for viral fusion and entry, to obtain a protein/peptide first mixture; wherein said stabilizing peptide is selected from the group consisting of: a peptide comprising SEQ ID NO:2, a peptide comprising a fragment of SEQ ID NO:2, a peptide comprising SEQ ID NO:3, a peptide comprising a fragment of SEQ ID NO:3, a peptide comprising SEQ ID NO:4, a peptide comprising a fragment of SEQ ID NO:4, a peptide comprising SEQ ID NO:5, a peptide comprising a fragment of SEQ ID NO:5, a peptide comprising SEQ ID NO:6, a peptide comprising a fragment of SEQ ID NO:6, a peptide comprising SEQ ID NO:7, a peptide comprising a fragment of SEQ ID NO:7, a peptide comprising SEQ ID NO:9, a peptide comprising a fragment of SEQ ID NO:9, a peptide comprising any combination of SEQ ID NOS:2-7 and 9, and a peptide comprising any combination of fragments of SEQ ID NOS:2-7 and 9;

(b) adding soluble CD4 to the first mixture to create a second mixture; and

(c) isolating the resulting fusion-active protein/peptide complex from the second mixture.

31. (New) The immunogenic composition of claim 1, wherein said peptide has an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5; SEQ ID NO:6; SEQ ID NO:7, and SEQ ID NO:9.

32. (New) The immunogenic composition of claim 7, wherein said peptide has an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5; SEQ ID NO:6, SEQ ID NO:7, and SEQ ID NO:9.

33. (New) The product formed by the method of claim 30, wherein said peptide has an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5; SEQ ID NO:6, SEQ ID NO:7, and SEQ ID NO:9.

34. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:2.

35. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:3.

36. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:4.

37. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:5.

38. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:6.

39. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:7.

40. (New) The immunogenic composition of claim 30, wherein said peptide is SEQ ID NO:9.